

REMARKS

Applicants acknowledge receipt of the Final Office Action dated March 20, 2009, in which the Examiner rejected claims 1-5 as anticipated by MacKenzie (WO02/086285 and US 7185701), indicated that claims 6 and 7 would be allowable if re-written in independent form, and indicated that claims 8 and 9 were allowed.

Applicant has amended claim 1 and respectfully traverses the rejection for the reasons set out below.

Mackenzie does not anticipate claim 1 as-amended

Claim 1 has been amended to recite that the hydraulic drive means includes a **front hydraulic chamber for moving the expansion cone in a forward direction** through the pipe when it is desired to expand the pipe and a **rear hydraulic chamber for moving . . . the anchor in a forward direction** through the pipe when it is desired to advance the anchor through the pipe. (emphasis added). In the embodiment illustrated in the application, these are chambers 30 and 31. Their function can best be seen in Figures 1, 3a, and 3b.

In contrast to the claim recitations, Mackenzie teaches the use of two or more pistons together (and in the same direction) to hydraulically advance the expansion cone. Unlike the presently claimed device, the pistons in the Mackenzie device (pistons 20, 22 and associated chambers 28, 30, respectively) are aligned in series and co-operate to advance the expansion cone.¹ Neither of Mackenzie's pistons is arranged to *move the anchor in a forward direction*, i.e. to re-set the device for the next expansion cycle and Mackenzie does not teach or suggest hydraulic means for this purpose. Instead, Mackenzie relies on the "pushing" the drill string to advance the anchors 36 and 40, as described at p. 16, ll. 13-22 of WO02/086285.

Notably, the statements in the office actions that indicate that Mackenzie discloses hydraulic drive means capable of moving the first and second relative to each other so as to move the anchor in a forward direction are incorrect. Specifically, the office action states that *the hydraulic drive means (chambers 20, 22) are capable of moving the first member (cylindrical member 24) relative to the second member (first tubular member 16) so as to move the anchor (38) forward*. This is not accurate. According to Mackenzie:

¹ Because the figures of Mackenzie are so difficult to read, an annotated and greatly-enlarged image of a portion of Figure 4 is again appended hereto for the Examiner's convenience.

The expansion cone 14 is attached to a first tubular member 16, which is in turn attached to a second tubular member in the form of a sleeve 17. Two laterally-extending annular shoulders are attached to the sleeve 17 and form first and second pistons 20, 22, respectively, which sealingly engage a cylindrical end member 24.

Cylindrical end member 24 includes a closed end portion 26 at a first end thereof. The engagement of the first and second pistons 20, 22 with the cylindrical end member 24 provides two piston areas 28, 30 in which fluid (e.g. water, brine, drill mud etc) can be pumped into via vents 32, 34 from the bore 16b. A second end of the cylindrical end member 24 is attached to a first anchoring device 36. (shortened and paraphrased, but precisely interpreted)

To express the teachings of Mackenzie even more concisely: the expansion cone is attached to the pistons and the anchor is attached to the piston chamber. Thus, when fluid is pumped into the chambers (28, 30), they expand. This expansion can have two only effects: namely to move the cone forward or to move the anchor backward.

Because the Mackenzie device does not include a second chamber that advances the anchor, and does not use hydraulic force in the re-setting portion of the cycle at all, Mackenzie's device does not anticipate claim 1.

Nor would it be obvious to modify Mackenzie's device to meet the limitations of claim 1. Mackenzie teaches that the drill string (rather than hydraulic force) is used to re-set the device and does not suggest any shortcomings with that approach. Still further, Mackenzie teaches that the two pistons 20 and 22 are aligned in series in order to increase the hydraulic force available for expanding the pipe. Specifically, Mackenzie teaches that,

If higher expansion forces are required, then additional pistons can be added to provide additional force to move the expansion cone 14 and thus provide additional expansion forces. The additional pistons can be added in series to provide additional expansion force. Thus, there is no restriction on the amount of expansion force that can be applied as further pistons can be added; the only restriction would be the overall length of the apparatus 10. (p. 20, l. 25 to p. 21, 1.2 of WO02/086285).

It would not be obvious to reverse the direction of one of the pistons of Mackenzie, as that would eliminate the advantage of the force-multiplying configuration taught by Mackenzie.

Because Mackenzie neither anticipates nor renders obvious claim 1 as originally filed, Applicants respectfully request that the rejection be reconsidered and withdrawn.

Claims 2-5

Claims 2-5 depend from claim 1 recite further limitations. Applicants submit that claims 2-5 are allowable over the art of record for at least the reasons set out above.

Allowable claims 6-7

Applicants appreciate the Examiner's indication that claims 6 and 7 would be allowable if re-written. Applicants agree, and have written new claims 8 and 9 that are commensurate in scope with claims 6 and 7 as-filed. Nonetheless, because of the amendments to claim 1, claims 6 and 7 have been left in their original state. Applicants respectfully submit that claims 6 and 7 are also allowable as-written because they depend from an allowable base claim.

Conclusion

The present amendments do not constitute new matter, as the recited elements are present in the specification as-filed.

Further, Applicants respectfully submit that the present amendments also do not constitute new subject matter that would require further searching, as they do not alter the scope of the claims. Rather, the present amendments consist of replacement of a functional limitation (i.e. hydraulic drive means that is "adapted to move . . . the anchor in a forward direction") with an equivalent mechanical limitation (i.e. hydraulic drive means that includes "a rear hydraulic chamber for moving . . . the anchor in a forward direction"). The present amendments are submitted for the sole purpose of clarifying the claim recitation, inasmuch as the current rejection appears to be based on a misunderstanding of the invention.

Finally, because the present amendments cure all of the grounds for rejection and place the case in condition for allowance, Applicants therefore request that the Examiner enter the amendments and allow the case. If the Examiner has any questions or suggestions that could be addressed telephonically, the Examiner is respectfully urged to telephone the undersigned.

Respectfully submitted,

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